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AUTHOR Sharpes, Donald K.
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ABSTRACT

Most researchers continue to assume that one's self-concept is primarily governed by environmental determinants despite abundant evidence of the strong influence of genetic heritability. Ways in which the self-concept is developmental in the organism, particularly how adolescents' perceptions of personal, relational, and academic self-identity occurs uniformly across cultures and environmental circumstances, are explored in this paper. The study assumes that self-concept is both a part of the cognitive structure and is a construct of personality. Data were collected from a validated survey instrument (translated from English into Chinese and Russian), and self-reported perceptions of individual self-concepts were drawn from 301 Chinese, 105 Kazakh, and 75 American Indian adolescents. Results indicate a high uniformity among native adolescent groups, that is, perceptions that adolescents have of their conscious personal identity and its various components are relatively uniform across cultures and ethnic status. Though some individual variability was found among individual perceptions of cognitive structural components of personal identity, the evidence suggests that development propensities are at work in the formation of the self-concept. Contains approximately 120 references. (RJM)

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ADOLESCENT SELF-CONCEPT
AMONG INTERNATIONAL NATIVE POPULATIONS

Donald K. Sharpes, PhD

Professor of Graduate Education, Weber State University

Abstract

Studies in self-concept have suffered from a lack of a theoretical base and a clear definition of meaning. It isn't clear if self-concept is a construct from the cognitive sciences; an active part of personality or of the Ego and unconscious; or a physiological process from neurological brain research. Nor is it clear whether the psychological construct of Self is related to other concepts such as personal identity, self-esteem or the ego as sometimes each of these terms refers to the whole person or a structure or element within a person. What is evident is that the majority of researchers continue to assume that the self-concept is primarily governed by environmental determinants despite abundant evidence from the neurosciences of the strong influence of its genetic heritability. This study assumes a genetic hypothesis, that self-concept is developmental in the organism, and that adolescent perception of personal, relational and academic self-identity occurs uniformly across cultures and environmental circumstances. It assumes that self-concept is a part of the cognitive structure and the construct of personality. Data were collected from a validated survey instrument, translated from English into Chinese and Russian. Self-reported perceptions of individual self-concepts were collected from 301 Chinese, 105 Kazakh and 75 American Indian adolescents. High uniformity was found to exist between native adolescent groups, though some individual variability was found among individual perceptions of cognitive structural components of personal identity. The implication is strong that developmental propensities are at work in the formation of the self-concept.

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Studies in adolescent self-concept, reliably used in clinical programs and taught in education and psychology, have suffered from a lack of a common theoretical base and clear and acceptable definitions. It isn't clear if self-concept is a part of mind and an ingredient of a mental state; a construct from the cognitive sciences; an active part of personality of the Ego and unconscious; or a physiological process from brain research. Is the Self a construct from philosophy, psychology, cognition, or the neurosciences, a part of personality, a thought process, or some identifiable entity existing in the cerebral cortex? The answer is yes, depending on which academic specialty or sub-field one subscribes to.

Neither is it clear whether the psychological construct of Self is related to other concepts such as personal identity, self-esteem or the ego (Harter, 1983) as sometimes each of these terms refers to the whole person or a structure or element within a person (De Levita, 1965). The majority of researchers and clinicians continue to assume that the self-concept is primarily governed in development by environmental determinants despite abundant evidence from the neurosciences of the strong influence of its genetic heritability.

Self-concept in this study is assumed to be a part of the cognitive structure and personality. This definition is based on the understanding that self-concept, and the perception of conscious reflections and unconscious responses to images by which we understand Self, personal identity and the remembrance of similar experiences, is part of an evolving and maturing genetic sequence converging in mid to late adolescence towards adulthood. This is an argument presented by genetic psychologists (Bouchard, 1990, von Boehmer & Kisielow, 1991) and evolutionary psychologists (Barlow, Cosmides, & Tooby, 1992).

Even the Gestaltist Kohler pointed out that: "Psychological facts and the underlying events in the brain resemble each other in all their structural characteristics." (Kohler, 1969, p. 66). Schuman (1995), a biologist investigating the process of physiological

learning, has found that substances known as growth factors are instrumental in shaping the development of the brain. She found that the gas nitric oxide plays a central role in learning by acting as a messenger between sending and receiving neurons.

Empirical Research on Self-Concept

Behavioral and social science research is rich with studies which typically link low self-concept to sociological conditions and a whole panoply of personal and social disorders. Evidence correlates low self-concept to suicide (Emery, 1981, Walker, 1983), crime (Kroeger, 1987), alcoholism, teenage pregnancy (Zongker, 1977, Patten, 1981) drug abuse (Reardon, 1983) and welfare dependency. Some maintain that low self-concept leads to economic problems that tax the public purse. Others believe that the economy itself contributes to personality disorders which result in feelings of low self-concept and low self-esteem. But whatever the relationship--and the research relationships are usually correlational and therefore not causative--self-concept is almost always described as having degrees like a thermometer, of being either high or low, positive or negative. Thus, the nature of self-concept, however defined, is a descriptive of a comparative relation with others.

O'Donnell (1979) reported that older adolescents have a slightly stronger relationship between self-reported and peer-reported self esteem measures than do younger adolescents. But the major differences were not between age, which is to be expected, but between sex and race differences. O'Donnell found a stronger relationship for whites than for young blacks, and for older females than for older males. Zongker (1977) found that pregnant teenage girls had poor feelings of self esteem, feelings of inadequacy and unworthiness, and were dissatisfied with their bodies. He concluded that girls with such attitudes prior to conception become high risks for pregnancy.

Studies in educational psychology attempt to demonstrate how self-concept, differentiated into academic and non-academic self-concept, correlates in school-aged children

with other schooling variables, like achievement in school or in a subject. Positive self-concept is presumed to be a significant contributor to academic and schooling success (Purkey, 1970, Hummell, 1983), and to the relative ease in adolescent adaptation to societal norms and expectations (Openshaw, 1983), and interpersonal relations (Tierno, 1983). On the other hand, low self concept is found to be associated with poor scholastic performance (Rosenberg, 1977), and with the learning disabled (Chapman, 1988). Marsh (1984, 1987, 1991, 1995) has investigated the various relationships of self-concept to adolescents, schooling, social groupings, and academic programs .

Shavelson (1976) proposed that self-concept is one's perception of self, and that these perceptions stem from how one perceives the general social environment, particularly significant others. Shavelson and others believe that the self-concept structure is "both multidimensional and hierarchical," and that new perceptions build on the Self in academic subjects and in nonacademic areas. Byrne (1983, 1984, 1986), Shavelson (1976, 1986, 1987), and Marsh (1995) have proposed various models for self-concept. These and other studies have also suggested that the theory base is unclear, that there is inferior methodology applied, and that instruments are psychometrically weak.

Marsh (1988, 1995) and associates investigated the multiple dimension of self-concept in co-educational high schools in Australia. Marsh cited earlier research which concluded that self-concept declines during preadolescent years, levels out in the middle adolescent years, and increases in later adolescence. Marsh (1988) also found differential self-concept perceptions at different adolescent stages. Marsh concluded that the single-sex co-educational transition enhances the self-concepts of both boys and girls, and "that this enhanced self-concept is not at the expense of academic progress." (Marsh, 1988)

Finkelstein (1983) found that older students have significantly lower scores on an identity scale than non-student peers, which appears to demonstrate that formal schooling actually has the unintended effect of prolonging adolescence. Students are reaching puberty

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earlier, but retaining a dependency status longer.

Chapman (1988) found that the self-concepts of learning disabled students were lower than non-handicapped children, but that great increments occur for academic self-concept than for general self-concept. Chapman reported that: "Academic self-concept is seen as a factor related to, yet distinct from general self-concept or self-esteem." (Chapman, 1988)

Openshaw (1983) discovered that adolescent self-esteem is more a function of social interaction and "reflected appraisals" of others than a modeling of parents' self-esteem. Buri (1986) investigated the effects of parental nurturance and found a positive correlation on the self-esteem of college students, but more so with females than males. Brookover (1989) noted "that self-concept of academic ability is not constant but varies with the social situation and expectations, evaluations that students perceive others hold for them." He draws this conclusion from his analysis of special education students who had higher self-concepts when placed in special education classes than when they were transferred to regular classrooms.

Researchers speak of early, middle, and late periods in transitional part of the life cycle (Reardon, 1983, Erdwins, 1981, Chiarn, 1987). Reardon (1983) notes that "adolescence is not a single event whose onset and cessation can be pinpointed." But the majority of empirical investigators, with the exception of Marsh who looks at self-concept's effects in relation to schooling and academic achievement, have focused on the self-concept of adolescents from the perspective of unfolding social relationships, particularly parents and peers (Openshaw, 1983). "Adolescence is a critical stage of identity seeking partially through the vehicle of widening peer relationships," says Rosenberg (1977). Tierno (1983) observed that middle schools are inappropriate for dealing with early adolescents' emerging sense of self identity, especially schools which emphasize academics and minimize personal development.

Schiarnberg (1969) presented an enlightening analysis of intergenerational relationships among adolescents in non-American cultures. He pointed out, following Erikson, that the primary source of conflict between parents and adolescents was the failure of parents to

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accord recognition to adolescent achievements, and the adolescent revolt against parent values and dominance. He also credits Lewin and his field theory, which maintains that the adolescent in transition was moving from an adolescent life space to an adult life space.

What seems clear is that the adolescent self-concept is not just a study of personality, but also of its interaction within a socio-cultural process. The socio-cultural interaction hypothesis, he concludes, suggests that environment is the primary agent responsible for forming the identity.

Verkuyten (1995) in The Netherlands investigated the relationship between ethnic identity and self-feelings among both majority and minority youth. Verkuyten assessed global self-esteem, self-concept stability and ethnic membership among Dutch youth and found no significant differences, except to report that minority Dutch youth, primarily Turkish and Chinese, identified more positively with their ethnic identity than the majority Dutch youth.

In South Africa, Meyer (1988) found that the scholastic self-concept makes a more significant contribution to the prediction of scholastic achievement than IQ. Meyer concluded that the non-academic self concept variables have no predictive value for the scholastic achievement of secondary school students in that country. Also in South Africa, Burns (1988) found in a study of both English white and coloured adolescents that there was less emphasis on coping with societal problems in South Africa than on issues that effect them personally.

In a major study of youth on the island of Cyprus, Metzger et al. (1982) found that adolescents were well adjusted. The study investigated 3,209 adolescents aged 11-18 in 21 schools, and concluded that girls were more adjusted than boys in behavior, but were more rebellious in their thinking. The study noted that its major conclusion was that girls do not "misbehave" but do not agree with the traditional values in the society especially concerning all the conservative sexual mores. But "the young people learn to identify themselves with the societal expectations and develop a high self concept." The study concluded that "the self concept of girls is higher both concerning desirable behavior and school performance."

Hanna (1989) conducted a study in several countries of sex differences in mathematics achievement among 12th grade girls. She and her associates found from an analysis of the Second International Mathematics Study (SIMS), and the Evaluation of Educational Achievement (IEA) that gender differences in math vary from country to country, and that it is unlikely that biological differences between the sexes vary from country to country. Her conclusion is that the data tend to contradict the theories that explain boys' superiority in math on the basis of biological factors. However, she does not address the issue of whether or not the general self-concept may influence the academic self-concept, and that the general self-concept may be regulated by biological differences.

These studies demonstrating gender differences in self-concept during adolescence, even compared with achievement variables, should not surprise us as it is well accepted that girls do indeed develop at some stages of early adolescence much more quickly than boys. Because girls are more biologically advanced than boys during certain stages of adolescence, we can reasonably conclude that their perceptions of self-concept would also be more advanced.

Hypothesis

The primary hypothesis is that adolescent self-concept is a conscious and unconscious set of developmental activities governed predominantly, but not exclusively, by genetic inheritances. Genetic forces are clearly at work in the perception of the Self and personal identity, though infrequently acknowledged except in the neurological sciences. Biologically evolving forces which form the unconscious are also shaping the conscious perception of identity. Harter suggested that there is "a need to consider the evaluation of the self from a developmental perspective." (Harter, 1983, p.366). Wheeler (1992) reports on scientists who are finding a substantial genetic underpinning to human behavior.

On the other hand, Maxine Greene points out that most researchers, including educational

psychologists and clinicians, favor the environmental factors. She writes: "Most assume that the self is a function of social and cultural relationships..." (Greene, 1991). The view is widely accepted that training, education, support and encouragement can improve one's personal identity and self concept.

Moreover, in an age when each minority group believes that there is a separate ethnic self-concept for each sub-population group (Banks, 1972), and that these images of the Self are primarily derived from social experiences or the lack of them ("In this country the black individual is given a consistent image of who he is by white society..." (Banks, 1972, p. 122-3), then it is imperative to experiment with the theory of the biological and developmental in this psychological construct of the Self, if only to test the biological basis for the ethnic construct, and to prevent political correct opinions from undermining known theory and determining the course of research investigations.

Method

Adolescent self-concept, for the purposes of this and future studies, is a set of genetically-driven perceptions, linked to the conscious and unconscious, of adolescent identity in its multiple manifestations; including perceptions about the body, attitude, interest, relations with others, perceptions of Self and personal and academic identity. It is assumed that this set of perceptions of identity, together with the inherited unconscious patterns of behavior embedded within them, will change throughout life's normal maturational process.

The intent has been to control for cross-cultural factors by conducting an international survey of adolescents from varied cultural backgrounds throughout the world. If results are relatively stable from different countries and continents, ethnicities and cultures, then it is reasonable to conclude that perceptions of adolescent self-concept are influenced by human biological determinants and an evolving personality. However, if there is demonstrated

variability in the results from country to country, then it is probable that cultural determinants are predominantly influencing general personality conceptions of the Self.

This long-term study has been pursued in several countries. A preliminary report of a pilot testing of my own survey instrument and data gathering from America, Cyprus, England, South Africa, and Cameroon in 1988 revealed that perceptions adolescents have of their personal identity do not vary significantly from country to country, or from culture to culture and have a high degree of constancy. Previous reports have documented results from White and Black youth in South Africa (Sharpes, 1992), and on majority Han and minority Korean and Mongolian youth in China (Sharpes & Wang, 1997). The selection of a wide diversity of adolescents in language, religion and beliefs, customs and living standards throughout several countries and among indigenous peoples provides the necessary cultural power for testing the genetic hypothesis.

Sample and Procedures

I developed a one-page self-concept inventory for ease of administration, modified from similar instruments like Rosenberg's (1989), and designed for adolescents. Coopersmith's Self Esteem Inventory is primarily for children, and hence unsatisfactory for adolescents. The Tennessee Self-Concept Scale (TSCS) is widely used, but its purpose is primarily clinical and it is too lengthy. Subsequently, the instrument was validated in 1989 with the Tennessee Self-Concept Scale. Ezeilo (1982) found the TSCS was a useful tool for studying Nigerian youth, thereby lending credibility to its cross-cultural acceptance.

The limitations of measuring various social and cognitive traits by means of survey instruments have been well documented and noted (Kahne, 1996, Bryne, 1996). For one thing, it isn't clear if students are responding to their actual beliefs or those they think others should have of them on a request form. Anderson and Hughes (1939) point out that such new

instruments are needed: "The results of this study suggest that one primary focus of future research in the area of self-esteem and parenting should be to develop better measurement instruments." (1989, p. 464). Moreover, Anderson reports that "young children's reports of the own self-esteem are likely to be different from reports provided by different sources, for example, parents or teachers." (Anderson, 1989, p. 463). Mallory (1989) found some interesting correlations with Q-Sort inventories on Ego identity. I have relied on several colleagues for translation, verification of translation, and administration of the instrument among adolescents in various conditions and countries.

The instrument has thus far been translated from English into Spanish, Afrikaans, Russian and Chinese. Results of this study come from the Russian translation of the instrument for the Kazakh adolescents, and Chinese for the Han. Translations into the vernacular constitutes an additional lowering of confidence in the construct, and thus weakens construct validity (Messick, 1995). It will not be possible to know with high confidence the accuracy of the translations, although they have been subjected to more than one cross-check, or whether or not evidence of the trait, in this case perceptions of the self-concept, might be construed differently in different languages.

This new instrument was first pilot-tested with a large group of secondary students in the US and Cyprus in 1986. A panel of professional teachers educators from North America, Europe, Africa and Asia, attending an international seminar in The Netherlands in 1988 also reviewed the instrument, serving as a validation of its cross-cultural and international administration and clarity of meaning.

The 36 items on the survey instrument ask respondents to answer on a five point Likert-like semantic differential scale to positively-worded statements. These statements, for simplification in reporting, have been in the form of grouped variables. Composite variables also facilitate interpretation of the data. These grouped variables are: 1) body; 2) attitude; 3)

interest; 4) relations with others; 5) perception of Self; 6) identity; and 7) general academic self-concept. Tables show the means and standard deviations of these grouped variables as an aggregate and between genders. According to Dyer (1979) such "ordered categories" fall between nominal and ordinal measurements"

Copies of the one-page survey instrument translated into Mandarin Chinese were distributed in six different cities to 603 randomly selected from high school students aged 13 to 18 in The People's People of China. The Russian translation served for the 105 Kazakh students. About 75 American Indian adolescents took the survey in English. (Previous results have been collected from adolescents in the US (c.2000+), Cyprus (591), Cameroon (50), England (244), South Africa (178), and US Hispanic (200+).

Discussion

If it can be demonstrated that there is relative uniformity among international indigenous adolescents on reports collected from a validated survey instrument, especially from among a random sample of a ethnic minorities and indigenous peoples, then it is reasonable to conclude that the perception of adolescent self-concept, together with other developmental and maturational factors, is predominantly an outcome of genetic heritability and evolving developmental processes and not of predominantly environmental differences. Self-concept then can be said to be only secondarily a result of ethnic or cultural origin, but primarily a result of the personal evolution of Self, cognition, and personal identity development. The idea of self-concept clearly may not be the same for adults as it is for adolescents, or indeed for one individual across the life span (Bryne, 1966). It may also be wrong to conclude that adolescent self-concept is simply an immature form of adult self-concept.

Tables I-III show the results. The first three tables list the seven composite variables of "body," "attitude," "interest," "relations," "perception of self," "identity," and "academic"

among selected indigenous adolescents of China, Kazakhstan and North America. The second set of three tables (Tables IV through VI) compares the Han Chinese and Kazakh adolescents with White American adolescents. The grand mean score of White Americans at 3.70 is identical with the grand mean score of American Indians. The main comparative group difference is that the Han, the indigenous peoples of China, have lower grand mean scores. There is greater similarity among the three groups in academic self-concept. One could assume that the larger sample size from the Han population might lead to the lower scores among the Han. But the same disparate comparative mean scores exist when one omits the American Indian sample and substitutes the White American sample, which at 528 is the largest sampled group.

The popular assumption is that Asian Americans have a higher cultural intensity for educational standards, at least in the US, than do other students. Standardized test and GPA scores tend to support this conclusion. However, the reason for perceived higher schooling achievement may simply be because Asian Americans spend more time on academic achievement, or that because of insistent parents, or a feeling of being a minority motivates them to work longer and harder. If one were to make a hesitant conclusion from the data in this study, however, it is that the self-reported perception of the Han Chinese academic Self is not higher than other ethnic groups, including Kazakhs, American Indians or White Americans.

The variability within an indigenous group is greater than the variability between groups, testifying to the hierarchical nature and cognitive structure of the self-concept. Among American Indian youth, for example, this disparity ranges from a high mean of 4.35 for the composite variable of "relations," to a low mean on the perception of the Self towards "body" at 3.20, a disparity that is much greater at 2.73 among females than for males at 3.49. This is a relatively high swing in scores but understandable if one knows any adolescents or has ever been one.

The uniformly highest mean scores are for the composite variable "academic." This

refers to the general academic self concept, as Marsh (1988, 1995) has demonstrated the distinction between levels of academic self concept separated in general by the subject schooling disciplines. Though the survey instrument has a tick location for whether an adolescent is in school or not--and many sampled in an earlier study in Cameroon were non-school adolescents--all the adolescents in this report were in formal schooling. Their highest perceived sense of Self is not in who they think they are psychologically, but in what they believe they can accomplish in an academic and learning environment. This phenomenon of a higher academic self-concept for natives, contravening the popular assumption that non-Europeans have lower academic self-esteem, was also found in a preliminary report comparing Hispanic and non-Hispanic American adolescents and South African adolescents (Sharpes, 1992).

The ego or psyche, the personality and cognitive self-concept, is in a ceaseless task of maintaining itself. Self-concept among adolescents may not initially appear to be a conscious awareness and acceptance of the biological self, that hierarchical set of genetic encodings guiding total development through life cycles. Adolescents may not have an active consciousness of themselves evolving into adults, and will certainly have an imperfect sense of personal identity.

Consciousness itself often seems to be a clear and distinct reality from body, as the Greeks and then Descartes and now cognitive scientists acknowledge. Nevertheless, emerging neuroscientific evidence shows a strong correlation of psychological constructs with identifiable physiological processes in the brain. Of course the evolution of a mature self-concept also involves social interaction with the environment. The human organism, the physiological self, seeks to maintain a coherence in time and place, with a continuity in personality and a continuity with others. Results from this study indicate that perceptions adolescents have of conscious personal identity and its various components are relatively uniform across cultures and ethnic status--strongly pointing towards the persistence of a developmental bias--and vary more among differing hierarchical strata of the individual Self.

TABLE 1
MEANS AND STANDARD DEVIATIONS ON
COMPOSITE VARIABLES OF SELF-CONCEPT FOR
HAN CHINESE, KAZAKH, AND AMERICAN INDIAN ADOLESCENTS
(N = 445)

	HAN	KAZAKH	American Indian
COMPOSITE VARIABLES	n = 301	n = 105	n = 39
Body	3.07 (.79)	3.45 (.57)	3.20 (.87)
Attitude	3.38 (.52)	3.43 (.43)	3.43 (.61)
Interests	3.46 (.51)	3.71 (.44)	3.71 (.51)
Relations	4.11 (.57)	4.37 (.53)	4.35 (.60)
Perception of Self	3.20 (.53)	3.32 (.38)	3.48 (.59)
Identity	3.40 (.66)	3.70 (.53)	3.75 (.70)
Academic	3.78 (.72)	4.03 (.58)	4.01 (.68)
GRAND MEANS	3.48	3.71	3.70

Note. Standard Deviations Are in Parentheses

TABLE 2
MEANS AND STANDARD DEVIATIONS ON
COMPOSITE VARIABLES OF SELF-CONCEPT FOR
FEMALE HAN CHINESE, KAZAKH, AND AMERICAN INDIAN
ADOLESCENTS
(N = 228)

	HAN	KAZAKH	American Indian
COMPOSITE VARIABLES	n = 163	n = 50	n = 15
Body	3.03 (.79)	3.48 (.56)	2.73 (.72)
Attitude	3.47 (.58)	3.39 (.46)	3.52 (.33)
Interests	3.48 (.53)	3.63 (.42)	3.70 (.46)
Relations	4.16 (.59)	4.37 (.59)	4.41 (.71)
Perception of Self	3.25 (.52)	3.31 (.41)	3.50 (.48)
Identity	3.48 (.65)	3.68 (.49)	3.70 (.84)
Academic	3.83 (.74)	3.93 (.57)	4.10 (.61)
GRAND MEANS	3.52	3.68	3.66

Note. Standard Deviations Are in Parentheses

TABLE 3
MEANS AND STANDARD DEVIATIONS ON
COMPOSITE VARIABLES OF SELF-CONCEPT FOR
MALE HAN CHINESE, KAZAKH, AND AMERICAN INDIAN
ADOLESCENTS
(N = 217)

	HAN	KAZAKH	American Indian
COMPOSITE VARIABLES	n = 138	n = 55	n = 24
Body	3.11 (.80)	3.43 (.58)	3.49 (.83)
Attitude	3.28 (.42)	3.46 (.41)	3.37 (.73)
Interests	3.42 (.48)	3.78 (.45)	3.72 (.54)
Relations	4.05 (.55)	4.37 (.48)	4.32 (.53)
Perception of Self	3.15 (.54)	3.34 (.35)	3.47 (.65)
Identity	3.30 (.65)	3.73 (.56)	3.78 (.61)
Academic	3.71 (.69)	4.12 (.59)	3.95 (.73)
GRAND MEANS	3.43	3.74	3.72

Note. Standard Deviations Are in Parentheses

TABLE 4
MEANS AND STANDARD DEVIATIONS ON
COMPOSITE VARIABLES OF SELF-CONCEPT FOR
CHINESE, KAZAKH, AND AMERICAN ADOLESCENTS
(N = 934)

	CHINESE	KAZAKH	AMERICAN
COMPOSITE VARIABLES	n = 301	n = 105	n = 528
Body	3.07 (.79)	3.45 (.57)	3.19 (.75)
Attitude	3.38 (.52)	3.43 (.43)	3.52 (.40)
Interests	3.46 (.51)	3.71 (.44)	3.59 (.47)
Relations	4.11 (.57)	4.37 (.53)	4.35 (.57)
Perception of Self	3.20 (.53)	3.32 (.38)	3.53 (.45)
Identity	3.40 (.66)	3.70 (.53)	3.76 (.57)
Academic	3.78 (.72)	4.03 (.58)	3.96 (.74)
GRAND MEANS	3.48	3.71	3.70

Note. Standard Deviations Are in Parentheses

TABLE 5
MEANS AND STANDARD DEVIATIONS
ON COMPOSITE VARIABLES OF SELF-CONCEPT
FOR FEMALE CHINESE, KAZAKH, AND AMERICAN
ADOLESCENTS
(N = 474)

	CHINESE	KAZAKH	AMERICAN
COMPOSITE VARIABLES	n = 163	n = 50	n = 261
Body	3.03 (.79)	3.48 (.56)	3.39 (.73)
Attitude	3.47 (.58)	3.39 (.46)	3.53 (.40)
Interests	3.48 (.53)	3.63 (.42)	3.61 (.47)
Relations	4.16 (.59)	4.37 (.59)	4.36 (.60)
Perception of Self	3.25 (.52)	3.31 (.41)	3.58 (.48)
Identity	3.48 (.65)	3.68 (.49)	3.83 (.56)
Academic	3.83 (.74)	3.93 (.57)	3.94 (.76)
GRAND MEANS	3.52	3.68	3.74

Note. Standard Deviations Are in Parentheses

TABLE 6
MEANS AND STANDARD DEVIATIONS ON
COMPOSITE VARIABLES OF SELF-CONCEPT FOR
MALE CHINESE, KAZAKH, AND AMERICAN ADOLESCENTS
(N = 460)

	CHINESE	KAZAKH	AMERICAN
COMPOSITE VARIABLES	n = 138	n = 55	n = 267
Body	3.11 (.80)	3.43 (.58)	2.99 (.72)
Attitude	3.28 (.42)	3.46 (.41)	3.50 (.41)
Interests	3.42 (.48)	3.78 (.45)	3.57 (.47)
Relations	4.05 (.55)	4.37 (.48)	4.33 (.54)
Perception of Self	3.15 (.54)	3.34 (.35)	3.49 (.41)
Identity	3.30 (.65)	3.73 (.56)	3.70 (.58)
Academic	3.71 (.69)	4.12 (.59)	3.97 (.71)
GRAND MEANS	3.43	3.74	3.65

Note. Standard Deviations Are in Parentheses

REFERENCES

- Ammaniti, M., A.P. Ercolani, & R. Tambelli (1989). Loneliness in the female adolescent. Journal of Youth and Adolescence, 18(4), 321-330
- Anderson, M., & Hughes M.H. (1989). Parenting attitudes and the self-esteem of young children. Journal of Genetic Psychology, 150 (4), 463-66
- Arvey, R.D. (1989). Job satisfaction: environmental and genetic components. Journal of Applied Psychology, 74 (2), 187-92
- Banks, J.A. & J.D. Grambs (1972). Black self-concept. New York: McGraw Hill
- Barkow, J.H., Cosmides, L. & Tooby, L. (1992). The adapted mind: evolutionary psychology and the generation of culture. New York: Oxford University Press
- Beardsley, T. (1991). Smart genes. Scientific American, 265 (2), 86-95.
- Bouchard, T.J., Lykken, D.T., McGue, M, Segal, N.L., & Tellegen, A. (1990, October). Sources of human psychological differences: The Minnesota study of twins reared apart. Science, 223-28
- Burns, R.B. (1988). Developmental tasks in adolescence. South African Journal of Education, 8 (1), 33-44
- Byrne, B. M., & Shavelson, R.J. (1986). On the structure of adolescent self-concept. Journal of Adolescent Psychology, 78 (6)
- Bruner, J. (1990) Acts of Meaning, Cambridge, Mass.: Harvard University Press
- Chaim, H-K. (1987). Change in self-concept during adolescence. Adolescence, 22, 69-76
- Chapman, J.W. (1988) Learning disabled children's self-concepts. Review of Educational Research, 58, 3, 347-71
- Collins, S. (1990). Selfless persons. Cambridge: Cambridge University Press
- Collis, B. and R. L. Williams (1987). Cross-Cultural comparisons of gender differences in adolescents: attitudes towards computers and selected school subjects. Journal of Educational Research, 81 (1)
- Cochran, M. and I. Bo (1989). The social networks, family involvement, and pro- and antisocial behavior of adolescent males in Norway. Journal of Youth and Adolescence, 18 (4), 377-98
- Crick F. (1994). The astonishing hypothesis: the scientific search for soul. New York: Charles Scribner's Sons
- Crick, F. and Koch, C. (1992) The problem of consciousness, Scientific American, 267, 3, 152-59
- De Levita, D. J. (1965). The concept of identity. New York: Basic Books
- Donald, M. (1991) Origins of the modern mind, Cambridge, MA: Harvard University Press
- Dyer, J.R. (1979). Understanding and evaluating educational research. Reading, Mass: Addison-Wesley
- Emery, P.E. (1983). Adolescent depression and suicide. Adolescence, 19, 245-58
- Erdwins, C.J. (1981). A comparison of different aspects of self-concept for young, middle-aged and older women. Journal of Clinical Psychology, 37, 484-90
- Erikson, E.H. (1980, 1959) Identity and the life cycle. New York: W.W. Norton
- Ezeilo, B.N. (1982). Cross-Cultural utility of the Tennessee Self-Concept Scale. Psychological Reports, 51, 897-98
- Erikson, E. H. (1968). Identity, youth and crisis. New York: W.W. Norton

- Festinger, L. (1962). A theory of cognitive dissonance. New York: Harper & Row
- Finkelstein, M.J. (1983). The impact of prolonged student status on late adolescent development. Adolescence, 18, 115-29
- Fischbach, G. D. (1992) Mind and brain, Scientific American, 267, 3, 48-59
- Frith, U. (1993) Autism, Scientific American, 268, 5, 108-114
- Freud, S. (1966). Complete psychological works. London: Hogarth Press
- Galbo, Joseph J. (1988): An exploration of the effects of the relationships of adolescents and adults on learning in secondary schools. The High School Journal
- Gardner, H. (1985) Frames of mind, The theory of multiple intelligences. New York: Basic Books
- Gardner, H. (1991) The unschooled mind, how children think and how schools should teach. New York: basic Books
- Gardner, H. & Hatch, T. (1989). Multiple intelligences go to school, educational implications of the theory of multiple intelligences. Educational Researcher, 18 (8), 4-10
- Gerguson, G.A. (1976). Statistical analysis in psychology and education (4th ed.). New York: McGraw Hill
- Gershon, E.S. & Rieder, R.O. (1992). Major disorders of mind and brain. Scientific American, 267(3), 126-33
- Goldman-Rakic, P.S. (1992) Working memory and the mind, Scientific American, 26(3), 110-17
- Grant, P.R. (1991). Natural selection and darwin's finches. Scientific American, 265 (4), 82-87
- Greene, M. (1991, March). A tapestry of the self. Educational Researcher, 28-30
- Harter, S. (1983). Development perspectives on the self system, in E.M. Hetherington (ed) Handbook on Child Psychology, Socialization, Personality and Social Development. (4th ed.). New York: Wiley
- Hinton, G.E. (1992) How neural networks learn from experience. Scientific American, 267(3), 145-59
- Hirsch, E. (1982). The concept of identity. New York: Oxford University Press
- Horgan, J. (1993) Eugenics revisited. Scientific American, 268, 6, 120-31.
- Hume, D. (1967, 1888, 1739). A treatise of human nature (ed. by L.A. Selby-Bigge). Oxford: Clarendon Press
- Hummell, R. (1983). Identity status and academic achievement in female adolescents. Adolescence, 18, 17-27
- Janaway, C. (1989). Self and world in schopenhauer's philosophy. Oxford: Clarendon Press
- Jensen, A. (1972). Genetics and intelligence. New York: Harper & Row
- Jensen, A. (1980). Bias in mental testing. New York: The Free Press
- Jones, S. (1993). The language of genes, solving the mysteries of our genetic past, present and future. New York: Anchor Books
- Jung, C. (1957). The undiscovered self. Boston: Little Brown & Co.
- Jung, C. (1959). Aion: researches into the phenomenology of self. Princeton, NJ: Princeton University Press

- Jung, C. (1968). The archetypes and the collective unconscious (2nd ed.). Princeton, NJ: Princeton University Press
- Jung, C. (1971). Psychological types. Princeton, NJ: Princeton University Press
- Kagan, J. (1994). Galen's prophecy. New York: Basic Books
- Kahne, J. (1996). The politics of self-esteem. American Educational Research Journal, 33(1), 3-22
- Kandel, E.R. Hawkins, R.D. (1992) The biological basis of learning and individuality. Scientific American, 267, 3, 78-87
- Kaufmann, S.A. (1991). Antichaos and adaption. Scientific American 265 (2), 78-84
- Kimura, D. (1992) Sex differences in the brain. Scientific American, 267,3, 118-25
- Kierkegaard, S. (1959). Either/Or. Princeton, NJ: Princeton University Press
- Kfir, D. (1988). Achievements and aspirations among boys and girls in high school: a comparison of two Israeli ethnic groups. American Educational Research Journal, 25 (2), 213-36
- Kohler, W. (1969). The task of Gestalt psychology. Princeton, NJ: Princeton University Press
- Kozulin, A. (1990) Vogotsky's psychology: a biography of ideas. Cambridge, MA: Harvard University Press
- Kroeger, R. (1987). Self-Concept changes during youth-home placement of adolescents. Adolescence, 22, 385-92
- Leung, K. & Lau, S. (1989). Effects of self-concept and perceived disapproval of delinquent behavior in school children. Journal of Youth and Adolescence, 18 (4), 345-60
- Lowry, R.J. (1973). Dominance, self-esteem, self-actualization, germinal papers of A.H. Maslow. Monterey, Calif.: Brooks/Cole Publishing Co.
- Mallory, M.E. (1989). Q-Sort definition of ego identity status. Journal of Youth and Adolescence, 18 (4), 399-412
- Marrack, P. & Kappler, J.W. (1993). How the immune system recognizes the body. Scientific American, 269 (3), 81-89
- Marsh, H.W. et al. (1995). The effects of gifted and talented programs on academic self-concept: the big fish strikes again. American Educational Research Journal, 32(2), 285-319
- Marsh, H. W. (1988). The transition from single-sex to coeducational high schools: effects on multiple dimensions of self-concept and on academic achievement. American Educational Research Journal 25 (2), 237-69
- Mascaro, J. (Tr.) (1965). The Upanishads. New York: Penguin Books
- Maslow, A.H. (1962). Toward a psychology of being. New York: D. Van Nostrand
- Messick, S. (1995). Validity of psychological assessment. American Psychologist, 50(9), 741-749
- Metzer, U. & Hajiangelis, P. (1982). The socialization of adolescents in Cyprus. Nicosia: Paedagogical Institute
- Meyer, L.W. (1988). Selfkonsep as voorspeller van skolastiese prestasie. South African Journal of Education, 8 (2), 112-18
- Mitchell, J.V. (1985). The ninth mental measurements yearbook. Lincoln: University

- of Nebraska
- Nossal, G.J.V. (1993). Life, death and the immune system. Scientific American 269,(3), 53-62
- O'Donnell, W.J. (1979). Adolescent self-reported esteem. Adolescence, 14, 465-70
- Openshaw, D. K. et al (1983). Socialization and adolescent self-esteem, symbolic interaction and social learning explanations. Adolescence, 19, 317-29
- Oppenheimer, P. (1989). The birth of the modern mind, self, consciousness, and the invention of the sonnet. New York: Oxford University Press
- Parker, D.H. (1928). Schopenhauer selections. New York: Charles Scribner's Sons
- Patten, M.A. (1981): Self concept and self esteem. Adolescence, 16, 765-78
- Petitto, M.A. (1987). On the autonomy of language and gesture: evidence from the acquisition of personal pronouns in American sign language. Cognition, 27 (1), 1-52
- Prabhavananda, S. (1987). Bhagavad Gita. Hollywood, Calif.: Vedanta Press
- Purkey, W.W. (1970). Self-Concept and school achievement. Englewood Cliffs: Prentice Hall
- Reardon, B. (1983). Factors relating to the self-concept of institutionalized, white, male, adolescent drug abusers. Adolescence, 18, 29-41
- Roid, G.H. & W.H. Fitts (1988). Tennessee Self-Concept Scale, revised manual. Los Angeles: Western Psychological Services
- Rogers, C.R. (1969). Freedom To learn. Columbus: Merrill Publishing
- Rosenberg, B.S. (1977). The self concept of the adolescent with learning disabilities. Adolescence, 12, 489-98
- Rosenberg, M (1989). Society and the adolescent self-image. Middletown, CT: Wesleyan University Press
- Rosenthal, R. & L Jacobson (1968). Teacher expectations for the disadvantaged. Scientific American, 218, 19-23
- Russell, B. (1932, 1967) Education and the social order. London: Unwin
- Salman, Ines A. (1982). Self-Concept and the school child: how to enhance self-confidence in young students learning to read. Unpublished M.S. Thesis, University of Southern California
- Sapienza, C. (1990). Parental imprinting of genes. Scientific American, 264, 52-60
- Scarr, S. & Weinberg, R.A. (1983a). The Minnesota adoption studies: genetic differences and malleability. Child Development, 54(2), 260-267
- Scarr, S. & McCartney, K. (1983b). How people make their own environments: a theory of genotype - environment effects. Child Development, 54(2), 424-435
- Schiemberg, L.B. (1969). Some socio-cultural factors in adolescent-parent conflict: a cross-cultural comparison of selected cultures. In Developmental Psychology (Ed. W.R. Looft, 1972), Hinsdale, Ill.: The Dryden Press, 176-95
- Sequeira, M. and M. A. Costa (1987). The socio-affective domain in the evaluation of the student's performance. Paper presented at the 7th International Seminar in Teacher Education, University of Maastricht, Holland
- Sharpes, D.K. (1992). Adolescent self-concept. Journal of Pedagogics, 13(1), 52-71
- Sharpes, D. K. (1988). General self-concept in adolescents: a preliminary

- cross-cultural survey. Paper presented at the Northern Rocky Mountain Educational Research Association Meeting, Jackson, Wyoming
- Sharpes, D.K. & Wang, X. (1997). Adolescent self-concept among han, mongolian and korean chinese. Adolescence, forthcoming, Fall, 1997
- Shatz, C.J. (1992) The developing brain, Scientific American, 267, 3, 60-67
- Shek, D.T.L. (1989). Perceptions of parental treatment styles and psychological well-being in Chinese adolescents. Journal of Genetic Psychology, 150 (4), 403-16
- Shevtowsky, B.J. (1983). Ego identity, development and obesity in adolescent girls. Adolescence, 18, 551-59
- Tierno, M.J. (1983). Responding to self-concept disturbance among early adolescents: a psychological view for educators. Adolescence, 18, 577-84
- Unger, P. (1990). Identity, consciousness, and value. New York: Oxford University Press
- Verkuyten, M. (1995). Self-esteem, self-concept stability, and aspects of ethnic identity among minority and majority youth in the Netherlands. Journal of Youth and Adolescence, 24(2), 155-175
- von Boehmer, H. & P. Kisielow (1991). How the immune system learns about self. Scientific American, 265 (4), 74-81.
- Vygotsky, L.S. (1962, 1986) Thought and language. Cambridge, MIT Press
- Walker, B.A. (1983). Adolescent suicide--a family crisis. Adolescence, 19, 285-92
- Wheeler, D. L. (1992) An escalating debate over research that links biology and human behavior. Chronicle of Higher Education, June 24, A7
- Williams, C.J.F. (1989). What is identity? Oxford: Clarendon Press
- Winkler, K. (1991, May 22). Revisiting the nature vs. nurture debate. The Chronicle of Higher Education, A5.
- Wright, L. (1995). Double mystery. The New Yorker (August 7th), 45-62
- Wylie, Ruth C. (1974). The self concept, a review of methodological considerations and measuring instruments. Lincoln: University of Nebraska Press
- Ziajka, A. (1972). The black youth's self-concept. In Developmental Psychology. Hinsdale, Ill.: The Dryden Press
- Zongker, C.E. (1977). The self concept of pregnant adolescent girls. Adolescence, 12, 477-88